

## **4.00.00.00 - ESTIMATING**

### **4.01.00.00 - GENERAL**

#### **4.01.01.00      Introduction**

The R/W estimate is the first step in building a credible budget. Estimates are prepared for all transportation projects regardless of whether capital expenditures for right of way on the transportation project exist. The elements of an estimate allow R/W Planning and Management to forecast capital outlay support personnel requirements, capital outlay expenditures, and future programming needs. Estimate data is entered into PMCS on the EVNT RW and COST RW1-6 Screens.

Since various levels of Caltrans' management, the CTC, the Legislature, and local agencies use R/W estimates, it is extremely important that R/W estimates be realistic and reliable. Overestimating may result in a project being deferred or eliminated. Underestimating understates the Department's financial obligations and may adversely affect supplemental funding or staffing needs.

#### **4.01.02.00      As Part of Project Development, Programming, and Budgeting**

Direct communication between R/W and Project Development staff is essential during all phases of the project development process. This process starts with initiation of planning studies and carries through to completion of PS&E. When it is determined that an estimate is needed, the program manager or project engineer submits a request to R/W. This is the beginning of a series of requests and estimates corresponding to changes that occur as the project develops.

As part of the estimating process, R/W will review right of way requirements submitted by Project Development for estimating purposes. R/W must notify Project Development if its review identifies design deficiencies. Deficiencies may include lack of replacement access, insufficient right of way width, any damage to a remainder parcel that has not been addressed, or any other unresolved issues. R/W will identify proposed design features that could have a dramatic effect on value.

#### **4.01.03.00      Contingency Costs**

Contingency costs are applied to acquisition and utility relocation costs for all estimates. Contingencies for relocation assistance, clearance/demolition, and title and escrow costs may be applied when considered appropriate. Contingency costs provide for possibilities such as administrative settlements, condemnation awards, utility overruns, interest payments, and unanticipated goodwill payments.

When preparing an estimate for a Project Study Report (PSR) or equivalent, R/W should apply a contingency rate of at least 25% unless district experience dictates otherwise. When preparing an estimate for a Project Report (PR), R/W should always base contingency costs on district experiences.

#### **4.01.04.00      R/W Data Sheet Certification**

The manager/supervisor responsible for Estimating and/or Planning and Management Capital shall review and recommend approval of all R/W Data Sheets prepared by staff. The DDC-R/W or designee shall approve all R/W Data Sheets. The following statement will be included directly above the DDC-R/W signature block in all R/W Data Sheets.

I have personally reviewed this Right of Way Data Sheet and all supporting information. I certify that the probable highest and best use, estimated values, escalation rates, and assumptions are reasonable and proper subject to the limiting conditions set forth, and I find this Data Sheet complete and current.

#### **4.01.05.00      Log of Estimates**

A log of all requests for original and revised estimates shall be maintained.

#### **4.01.06.00      Estimate File**

The Senior Agent responsible for Estimating must ensure that a file is maintained for each project for which a R/W estimate is prepared. The file will

remain active until the right of way portion of the project is completed, at which time it will become part of the project file.

#### **4.01.06.01**      **Filing System**

For maximum retrievability of previous estimates or other information, the following procedure shall be implemented.

- Establish a file when the first request for a project estimate is received.
- Identify the file by county-route-postmile, expenditure authorization, project limits, and requesting unit.
- Maintain the file in chronological sequence.

#### **4.01.06.02**      **File Contents**

The individual estimate file shall contain:

- The map(s) used in preparing the estimate, with date of original map(s) and dates of subsequent revisions. If, due to size or number, the maps cannot be maintained in the file, a reference should be placed in the file indicating where the maps are filed. Regardless of whether the maps are maintained in the file or in another location, they are part of the file and are to be retained in accordance with file retention requirements.
- Copies of all memoranda of request and responses.
- Copies of all R/W Data Sheets (including attachments) and Estimate Worksheets prepared for the project, along with accompanying R/W Data Sheet Transmittal Memoranda.
- Comparable sales and all other data used to prepare the estimate.
- A diary annotating by date and person making the entry each action taken regarding estimates on the project. The diary shall contain all actions the estimator takes throughout the life of the project.

#### **4.01.07.00**      **Preliminary Estimates**

R/W is often asked to provide a rough estimate

without sufficient lead time or adequate mapping. These estimates are prepared using, at a minimum, the first page of the Data Sheet and the Transmittal Memorandum. The face of the R/W Data Sheet for this type of estimate is marked in bold caps:

#### **"NOT VALID FOR BUDGETING OR PROGRAMMING PURPOSES"**

The reasons for this notation are indicated in the Transmittal Memorandum.

#### **4.01.08.00**      **Project Estimate Mapping**

R/W Engineering is ultimately responsible for project estimate mapping. Guidelines for map preparation are found in the R/W Engineering Chapter 6, Section 6.01.03.00, and the Drafting and Plans Manual, Section 4-2.1. Some districts have made arrangements for R/W to receive mapping suitable for estimating purposes from other functional units. These arrangements are acceptable as long as the estimate mapping complies with the requirements outlined below.

The unit requesting the estimate shall supply R/W with sufficiently detailed right of way requirements that include width of right of way, alignment, and at least two ties to major property lines.

Estimate mapping should be prepared using aerial mapping, mosaics or as-built plans at 1"=50' (preferably) or 1"=100' for urban areas and 1"=100' (preferably) or 1"=200' for rural areas. Mapping prepared using the metric system shall be consistent with the Department's current policy on metric conversion.

The mapping shall show:

- Improvements
- Property Ownership
- Assessor's Parcel Numbers
- Size of Each Parcel
- Proposed Right of Way Lines
- Access Control
- Easements (Permanent and Temporary)
- Significant Property Ingress Modifications
- Utilities
- Railroad Facilities

#### **4.01.09.00**      **Training**

Each agent assigned estimating responsibilities should receive thorough orientation on why

estimates are prepared and how they are used. Ideally, an estimator should have received practical experience as an appraiser and have taken basic appraisal courses, at the very least. Additional courses in building cost estimating and a working familiarity with various cost estimating resources are recommended. In addition, orientation to the utility relocation function is desirable.

#### **4.01.10.00**      **Hazardous Waste Site Identification**

In the early stages of the project development process, District Project Development and Environmental units will identify sites or facilities that have the potential for being contaminated with hazardous waste or materials. The presence of hazardous waste or materials in future right of way can cause costly project delays if discovered late in the project development process. It is imperative, therefore, that every effort be made to ensure early detection of hazardous waste sites.

As part of the estimating process, estimators must field review subject parcels. If an estimator suspects a hazardous waste site or hazardous materials are present in the proposed right of way and have not been previously identified, the estimator must immediately send written notification to the District Project Development and Environmental units and both District and R/W Hazardous Waste Coordinators. A copy of the memorandum is to be attached to the R/W Data Sheet (Exhibit 4-EX-1).

When field reviewing subject properties, estimators should pay special attention to improvements where structural components could contain large amounts of hazardous materials such as asbestos. In addition, present and prior land uses may indicate the potential for contamination on the site, as well as the possible presence of underground storage tanks that may be in use or have been used for the storage of hazardous materials.

Examples of existing or former uses where hazardous wastes or material may exist include:

- Commercial and industrial sites such as service stations, muffler shops, bulk plants, paint manufacturing companies, machine shops, plating works, dry cleaning plants, chemical and fertilizer companies that may use or have used solvents, cleaning compounds, catalysts, cutting oils, plating solutions, dyes, paints, or other chemicals.
- Junkyards, auto wrecking yards, dumps, or landfills.
- Underground or aboveground tank storage facilities for liquid hydrocarbons, pesticides, or other toxic materials.
- Asbestos siding, roofing, flooring, or insulation on or in existing buildings.
- Disposal dumps or pits that may contain agricultural chemicals or industrial wastes.
- Utility substations or storage/maintenance facilities.
- Sites where contamination may have resulted from an adjacent property owner's operation, or where regulatory action involves implementation of hazardous waste regulations.
- Military bases and reservations.
- Atomic energy sites.
- Railroad sites.

**NOTES:**